

# Science Toolkit: Grade 6 Objective 3.D.1.e

Student Handout: Science: Grade 6 Objective 3.D.1.e

Standard 3.0 Life Science

Topic D. Evolution

Indicator 1. Explain that in any particular environment, the growth and survival of organisms and species depend on the physical conditions.

Objective e. Describe ways in which changes in environmental conditions can affect the survival of individual organisms and entire species.

Selected Response (SR) Item

Question

Use the information below to answer the following.

In a lab study, eight bean plants are grown from seeds in individual containers. After a few leaves are visible on each plant, the plants are separated into two groups. One group is placed in a room that gets sunlight, and the other group is placed in a dark room. All of the plants receive the same amount of water daily. After two weeks, the plants are observed.

**PLANTS GROWN IN SUNLIGHT**



**PLANTS GROWN IN DARK ROOM**



**OBSERVATIONS**

Plant Feature	Plants Grown in Sunlight	Plants Grown in Dark Room
Leaves	Dark green	Light yellow
Stem	Green and sturdy	Yellow and wilted
Average Plant Height	30 cm	18 cm

Some volcanic eruptions release so much ash into the air that the amount of sunlight reaching the surface of Earth is reduced.

Which requirement for plant growth would be greatly reduced after such an eruption?

- A. carbon dioxide
- B. energy
- C. oxygen
- D. water

Correct Answer

B. energy

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